THE CLAIMS

1. (Previously Presented) A medical imaging system, comprising:

a medical imaging device having a main body and an imaging element; and

an auxiliary module removably connected to said medical imaging device having a cooling unit configured to cool liquid to a chilled state and circulate the chilled liquid to and from said imaging element, wherein the chilled liquid absorbs heat produced by said imaging element.

2. (Original) The medical imaging system of claim 1, wherein said imaging element includes an x-ray tube, wherein said cooling unit circulates the chilled liquid at least one of over and within said imaging element.

3. (Original) The medical imaging system of claim 2, further comprising a C-arm supported by said main body, wherein said x-ray tube is positioned on an end of said C-arm.

4. (Original) The medical imaging system of claim 1, further comprising:

a cooling duct surrounding at least a portion of said imaging element, said cooling duct having a fluid inlet and an fluid outlet;

a fluid input line in fluid communication with said cooling unit and said fluid inlet, wherein the chilled liquid is supplied to said cooling duct from said cooling unit through said fluid input line; and

a fluid return line in fluid communication with said cooling unit and said fluid outlet, wherein the chilled liquid is returned to said cooling unit through said fluid return line.

5. (Original) The medical imaging system of claim 4, wherein said cooling duct is removably connected to said imaging element.

6. (Original) The medical imaging system of claim 1, wherein said auxiliary module is mobile.

7. (Previously Presented) The medical imaging system of claim 1, wherein said auxiliary module is permanently affixed to one of a floor and a wall.

8. (Original) The medical imaging system of claim 1, wherein said auxiliary module further comprises a booster battery pack, wherein said booster battery pack is configured to be electrically connected to said medical imaging device in order to provide additional power to said medical imaging device.

9. (Previously presented) The medical imaging system of claim 1, wherein said auxiliary module is remotely located from said medical imaging device.

10. (Original) The medical imaging system of claim 1, wherein said auxiliary module includes a rolling cart that supports said cooling unit.

11. (Previously Presented) A medical imaging system, comprising:

a medical imaging device having a main body and an imaging element; and

an auxiliary module having a booster battery pack, wherein said booster battery pack is configured to be electrically connected to the medical imaging device in order to provide additional power to the medical imaging device, wherein said auxiliary module is separate, distinct, and removably connected directly to said medical imaging device.

12. (Original) The medical imaging system of claim 11, wherein the medical imaging device is an x-ray system and said imaging element includes an x-ray tube.

13. (Original) The medical imaging system of claim 12, further comprising a C-arm supported by said main body, wherein said x-ray tube is positioned on an end of said C-arm.

14. (Original) The medical imaging system of claim 11, wherein said auxiliary module is mobile.

15. (Previously Presented) The medical imaging system of claim 11, wherein said auxiliary module is permanently affixed to one of a floor and a wall.

16. (Original) The medical imaging system of claim 11, wherein said auxiliary module is remotely located from said main body.

17. (Original) The medical imaging system of claim 11, wherein said auxiliary module includes a rolling cart that supports said booster battery pack.

18. (Original) The medical imaging system of claim 11, wherein said main body further comprises a power boost receptacle electrically connected to a power supply system; and said auxiliary module further comprises a power cable electrically connected to said booster battery pack, wherein said power cable is removably connected to said power boost receptacle so that the power supply system may draw power from said booster battery pack.

19. (Previously Presented) An auxiliary module configured to cool an imaging element of a medical imaging device and supply additional power to the medical imaging device, the auxiliary module comprising:

a cooling unit configured to cool liquid to a chilled state and circulate the chilled liquid to and from the imaging element, wherein the chilled liquid absorbs heat produced by the imaging element; and

a booster battery pack, wherein said booster battery pack is configured to be electrically connected to the medical imaging system in order to provide additional power to the medical imaging system;

said auxiliary module being removably connected to said medical imaging device.

20. (Original) The auxiliary module of claim 19, wherein the imaging element includes an x-ray tube and the medical imaging device is an x-ray imaging system.

21. (Original) The auxiliary module of claim 20, wherein the x-ray imaging system includes a C-arm having a first and second prong, wherein the x-ray tube is positioned on the first prong, and a detector is positioned on the second prong.

22. (Original) The auxiliary module of claim 19, further comprising a cart supporting said booster battery pack and said cooling unit, and wherein said cart is mobile.

23. (Original) The auxiliary module of claim 19, wherein the auxiliary module is permanently affixed to one of the medical imaging device, a floor and a wall.

24. (Original) The auxiliary module of claim 19, wherein the auxiliary module is separate and distinct from the medical imaging device.

25. (Previously Presented) In a mobile x-ray device having a C-arm with an x-ray tube positioned on one end of the C-arm and a detector on the other end of the C-arm, a method of cooling the x-ray tube comprising:

operatively connecting an auxiliary module having a cooling unit in a removable fashion to the mobile x-ray device;

cooling liquid with the cooling unit thereby producing chilled liquid;

passing the chilled liquid from the cooling unit to the x-ray tube; and

circulating the chilled liquid around at least a portion of the x-ray tube such that the chilled liquid absorbs heat produced by the x-ray tube during an x-ray imaging procedure.

26. (Original) The method of claim 25, further comprising:

providing a cooling duct around at least a portion of the x-ray tube, wherein said passing includes passing the chilled liquid from the cooling unit to the x-ray tube through a first tube that is in fluid communication with the cooling unit and the cooling duct; and

returning the chilled liquid back to the cooling unit through a second tube that is in fluid communication with the cooling unit and the cooling duct.

27. (Previously Presented) The method of claim 25, further comprising permanently affixing the auxiliary module to one of a floor, and a wall.

28. (Original) The method of claim 25, further comprising remotely locating the auxiliary module from the x-ray device.

29. (Original) The method of claim 25, further comprising

providing a booster battery pack in the auxiliary module; and

electrically connecting the booster battery pack to the x-ray device so that the x-ray device draws power from the booster battery pack.